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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,551	05/10/2005	Akihiko Igawa	2003JP317	7163

26289 7590 06/28/2006

AZ ELECTRONIC MATERIALS USA CORP.
ATTENTION: INDUSTRIAL PROPERTY DEPT.
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SOMERVILLE, NJ 08876

EXAMINER

CHU, JOHN S Y

ART UNIT PAPER NUMBER

1752

DATE MAILED: 06/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/534,551	Applicant(s) IGAWA ET AL.	
	Examiner John S. Chu	Art Unit 1752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/3/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office action is in response to the application filed May 10, 2005 with a 371 filing date of November 14, 2003.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by JP 06-035183, JP 06-43637 or JP06-35182.

The claimed invention is drawn to the following:

1. A pattern forming method which is characterized in comprising
[1] a step of applying on a substrate material a photosensitive composition comprising (a) an alkali-soluble resin, (b) a photosensitizer having a quinone diazide group, (c) a photo acid generator, (d) a crosslinking agent and (e) a solvent to form a photosensitive layer,
[2] a step of exposing the photosensitive layer to light through a mask,
[3] a step of removing said exposed area by development to form a positive image, and then
[4] a step of exposing a whole area of the positive image to light.

JP 06-035183 discloses the following:

Art Unit: 1752

A positive resist compsn. comprises (A) a resin which can be hardened by means of an acid, (B) a quinone diazide cpd. (C) a crosslinking agent, (D) an acid generator, (E) a dye and (F) a solvent.

Pref. (A) is a novolak resin. (B) is an o-naphthoquinone diazide cpd. (C) is a compound of formula $(CH_2)_r$ OR (I). (I) - R = H or a lower alkyl group. s = 1 - 4

The resist compsn. is applied to a base. The base is exposed to light through a mask. The exposed portion is developed and removed to produce a positive resist pattern. Then the coloured image which corresponds to the unexposed portion is entirely exposed to light and hardened. Thus, a colour filter is obtd..

ADVANTAGE - The resist compsn. has high resolution and high heat resisting property. A colour filter can be mfd. easily. The process can readily be controlled.

in the abstract which clearly anticipates the claimed invention for the method recited in the claims.

Likewise JP 06-43637 discloses the following which anticipates the recited method:

PURPOSE: To provide the industrially advantageous method for holding positive patterns which are excellent in various performances, such as heat resistance, solvent resistance and adhesion to a base body.

CONSTITUTION: This method for holding the patterns consists in applying a positive type resist compsn. 1 contg. a resin compsn. contg. an alkaline soluble resin and a crosslinking agent, a quinone diazide compd. 2 and a photo-acid generating agent 4 on the base body 5, then exposing the resist compsn. through a mask, developing away the exposed parts to form the positive type resist patterns 6 and curing the resist patterns 6 which are non-exposed patterns or curing these parts by full-surface exposing or curing by an acid after fullsurface exposing.

This disclosure meets the claimed imagewise exposure, development and overall exposure step.

JP 06-35182 discloses the following:

PURPOSE: To provide the positive type resist compsn. which is excellent in various performances, such as resolution and heat resistance, and the process for easy production of the color filters which are excellent in various performances, such as solvent resistance and fineness.

CONSTITUTION: This positive type resist compsn. is formed by incorporating a thermosetting resin, quinone diazide compd., crosslinking agent, dyestuff 3 and solvent therein. This process consists in applying this positive type resist compsn. on a base body 4, then exposing the compsn. through a mask 5, developing the exposed parts to form positive type resist patterns 6 and subjecting the positive type resist patterns 6 to full-surface exposing, then curing the positive type resist patterns 6 after the exposing.

Art Unit: 1752

Likewise this reference teaches the recite method steps as claimed in the current rejection.

HISHIRO et al anticipates the claimed invention at Example 1 wherein the composition is spin coated, exposed to light, developed, exposed to an whole area-exposure and heated, see column 12, lines 45-53. Examples 2-14 disclose the claimed method wherein a color filter is formed.

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. YASUDA (6,440,632) is cited of interest wherein a composition having the same ingredients claimed is processed by imagewise exposure, overall exposure and then developed which fails to anticipate the claimed invention.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Chu whose telephone number is (571) 272-1329. The examiner can normally be reached on Monday - Friday from 9:30 am to 6:00 pm.

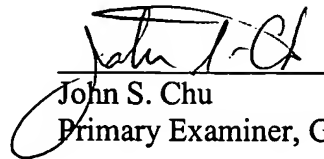
If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Cynthia Kelly, can be reached on (571) 272-1526

The fax phone number for the USPTO is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PMR only. For more information about the PAIR

Art Unit: 1752

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John S. Chu
Primary Examiner, Group 1700

J.Chu
June 24, 2006